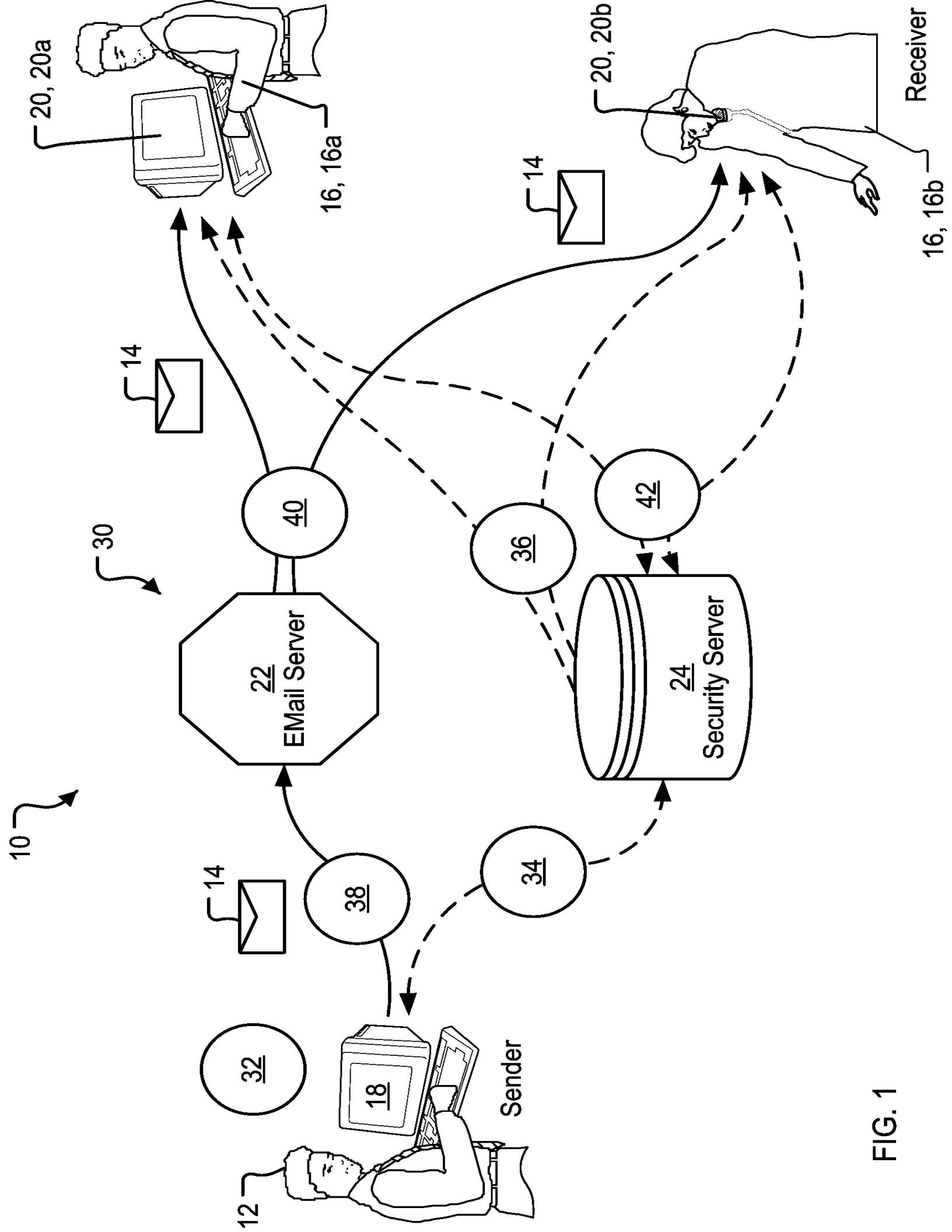


| No | Field | Type | Description |
|-----|-----------------|---------|--|
| 1. | ResourceID | String | A unique ID assigned to this communication |
| 2. | ResourceType | Integer | The application type (e.g., email, instant messaging, etc.) |
| 3. | ResourceKey | Binary | The encryption key |
| 4. | KeySize | Integer | The size of the key |
| 5. | KeyCreator | String | The ID of the key creator |
| 6. | KeyOwner | String | The ID of the key owner |
| 7. | DateCreated | Date | The date and time when the key was created |
| 8. | ReleaseAfter | Date | The date and time before which the key should not be released (per recipient) |
| 9. | ExpireOn | Date | The date and time after which the key should not be released (per recipient) |
| 10. | LastRelease | Date | The last date time the key was released (per recipient) |
| 11. | ExpectedRequest | Date | The date and time by which the key is expected to be requested (per recipient) |
| 12. | NumReleased | Integer | The number of times the key was released (per recipient) |
| 13. | NumReleases | Integer | The number of times the key should be released (per recipient) |

TABLE 1



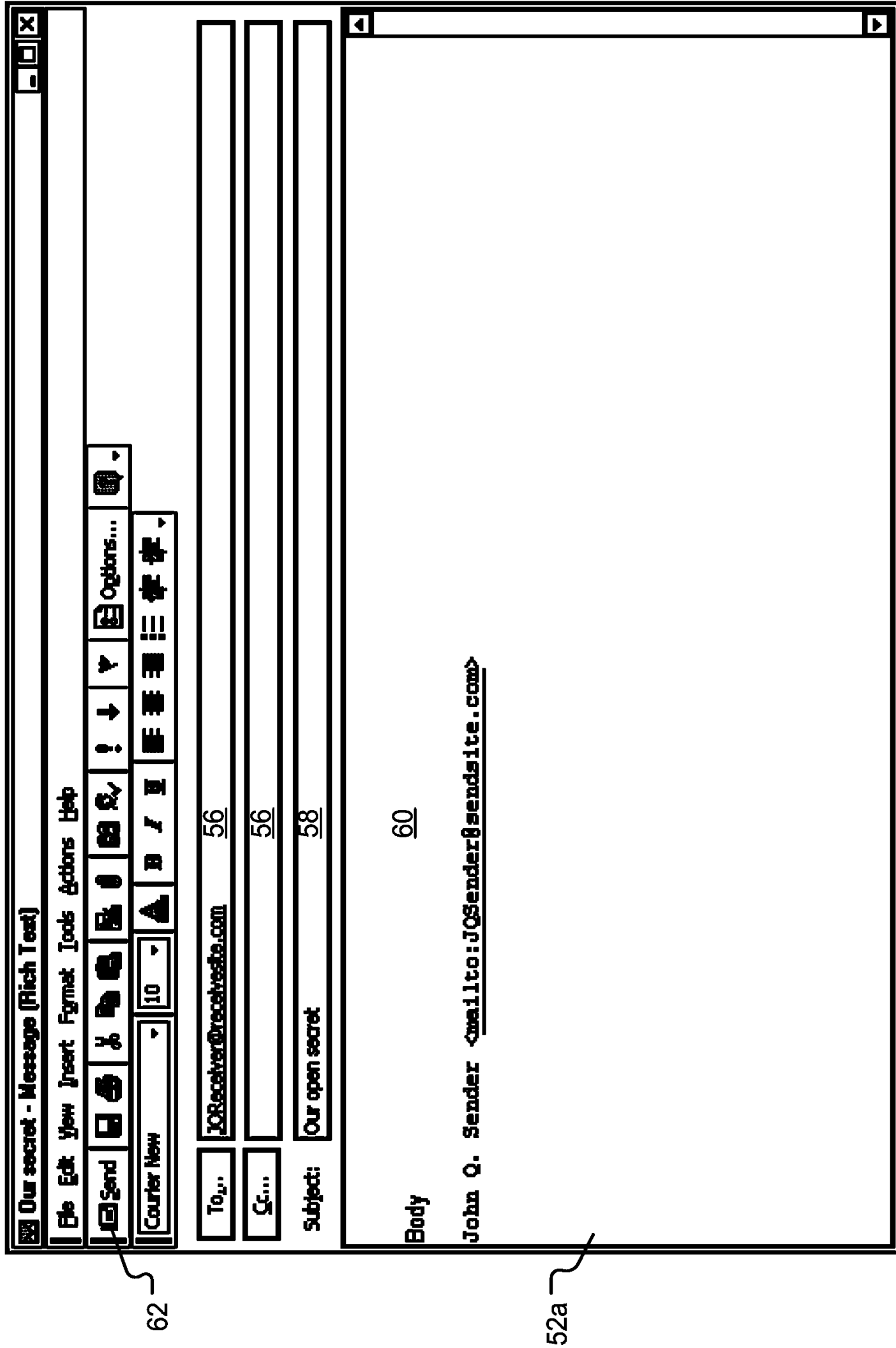


FIG. 2a

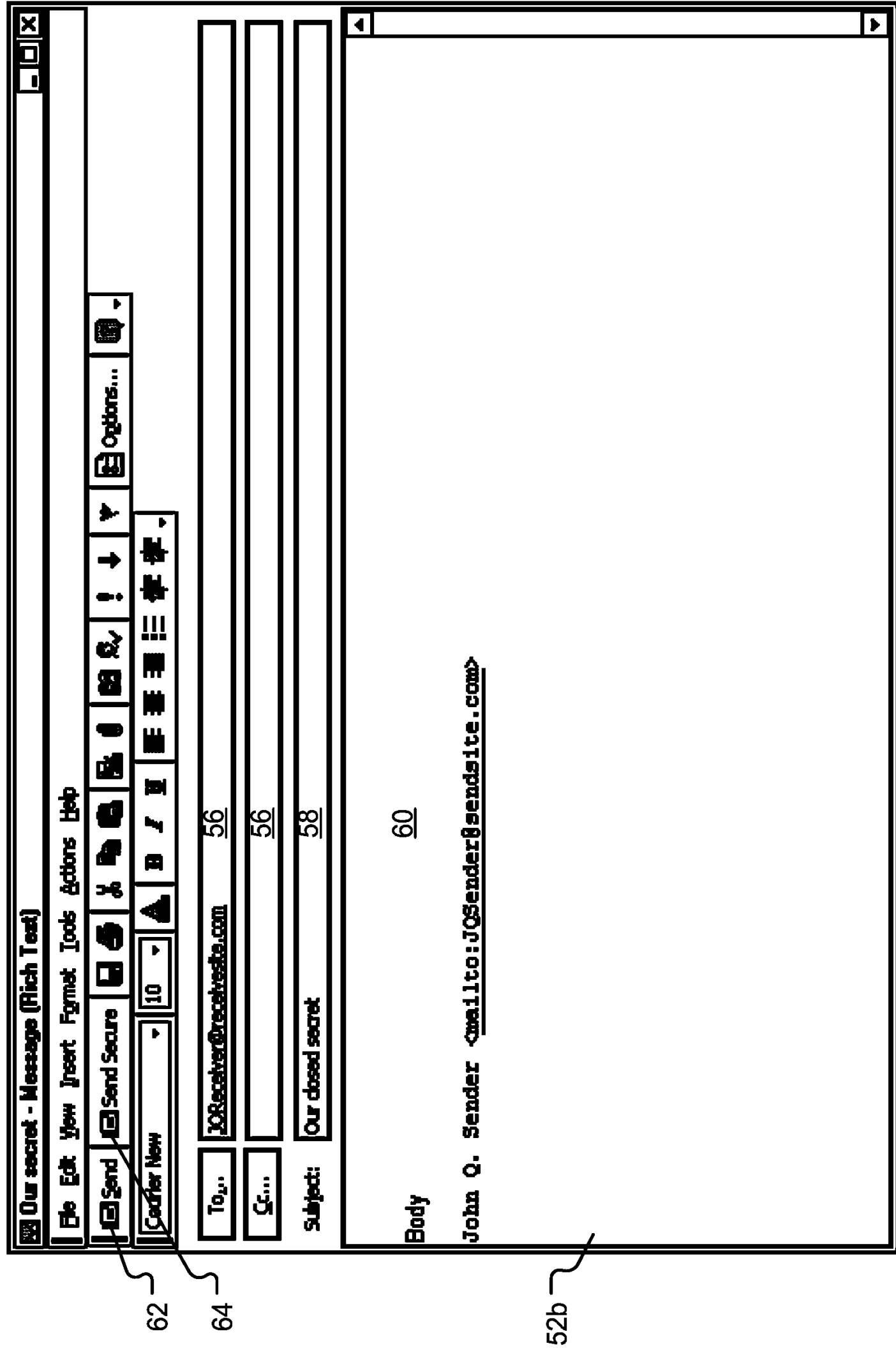


FIG. 2b

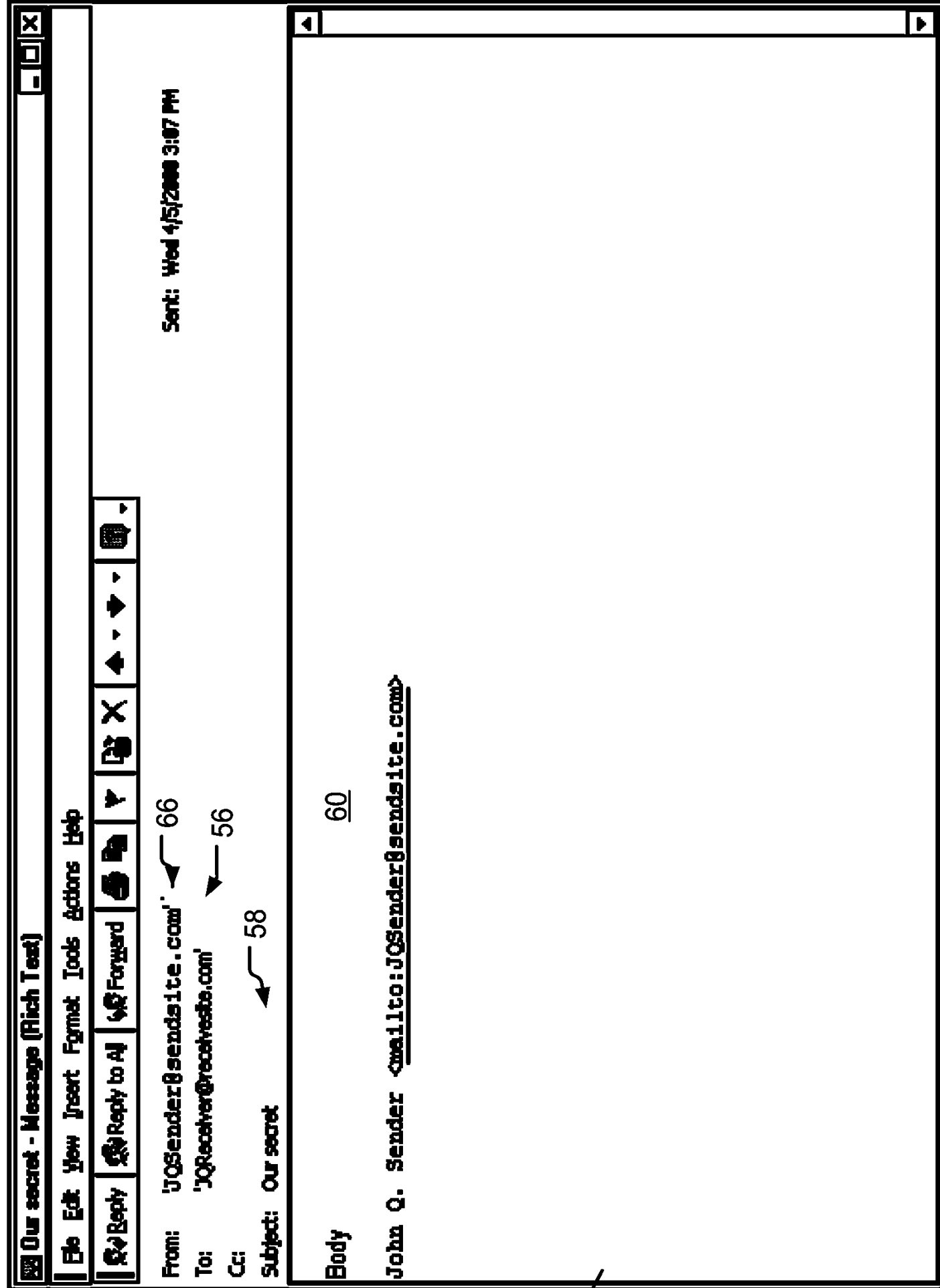
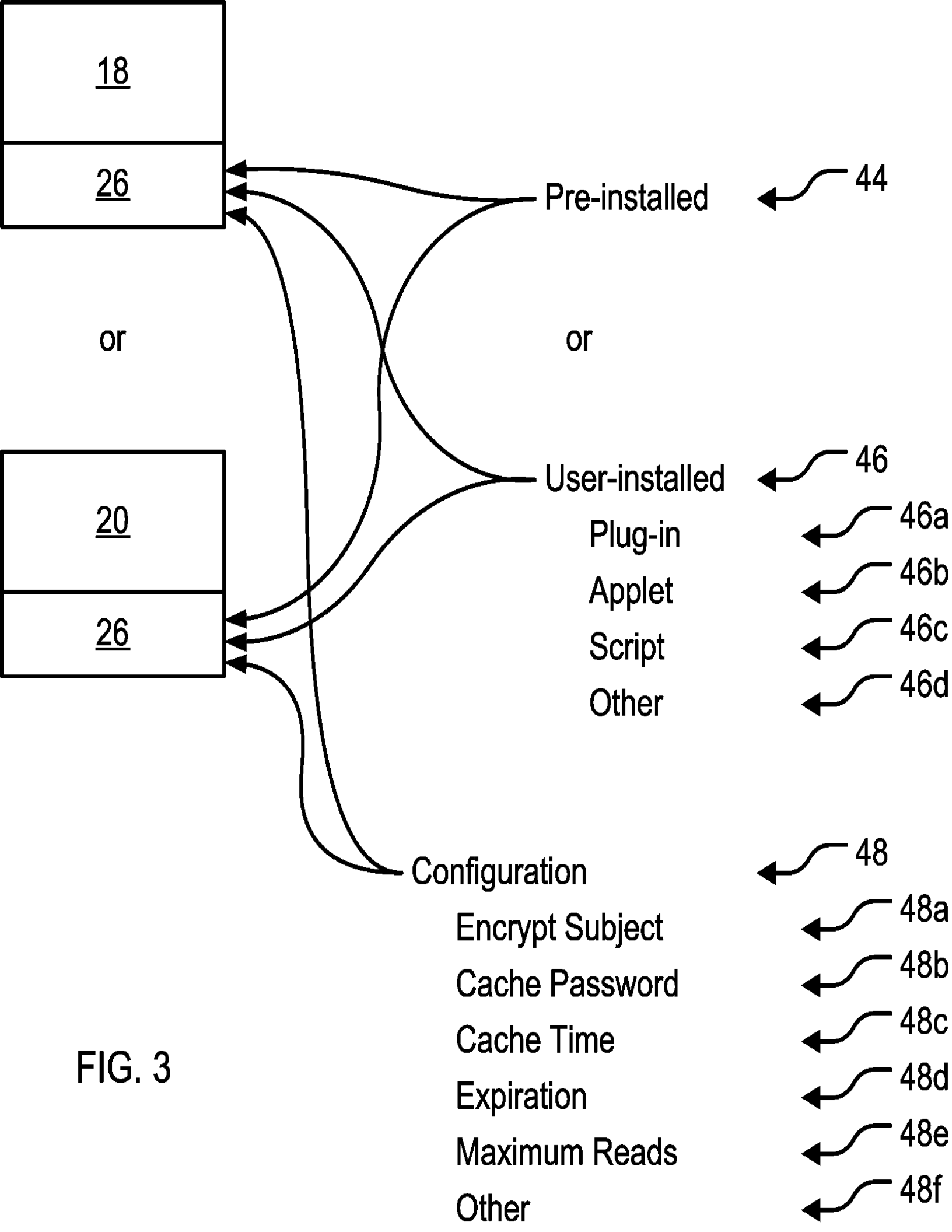


FIG. 2c



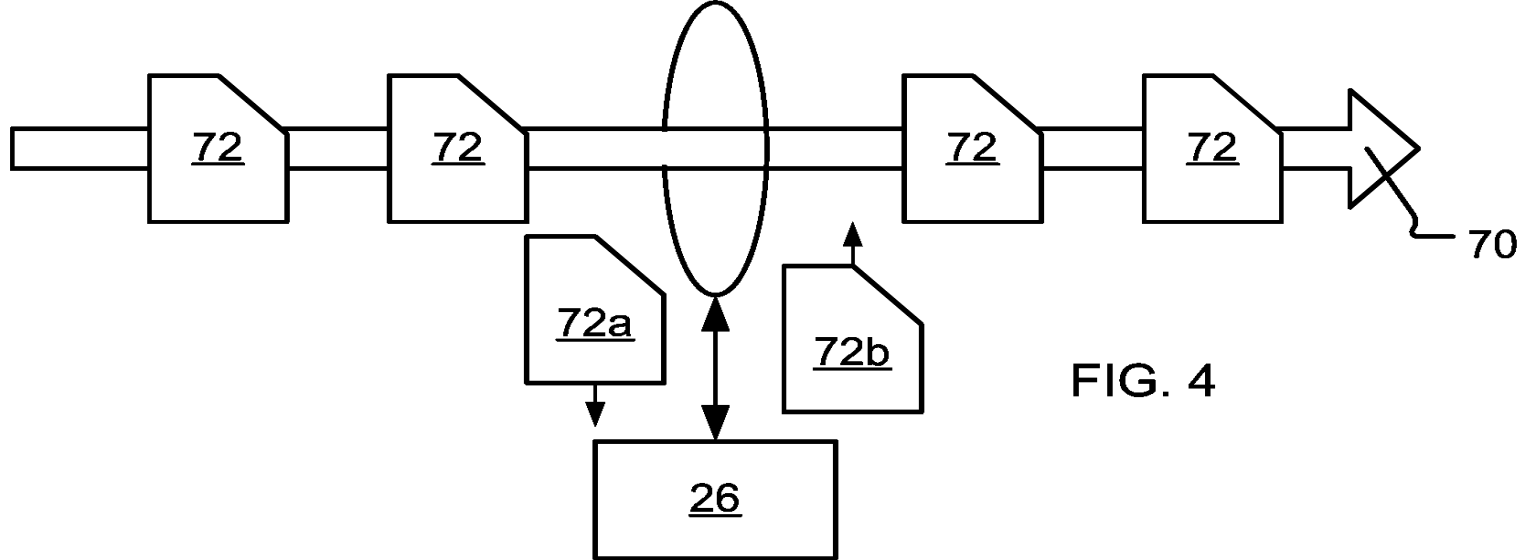
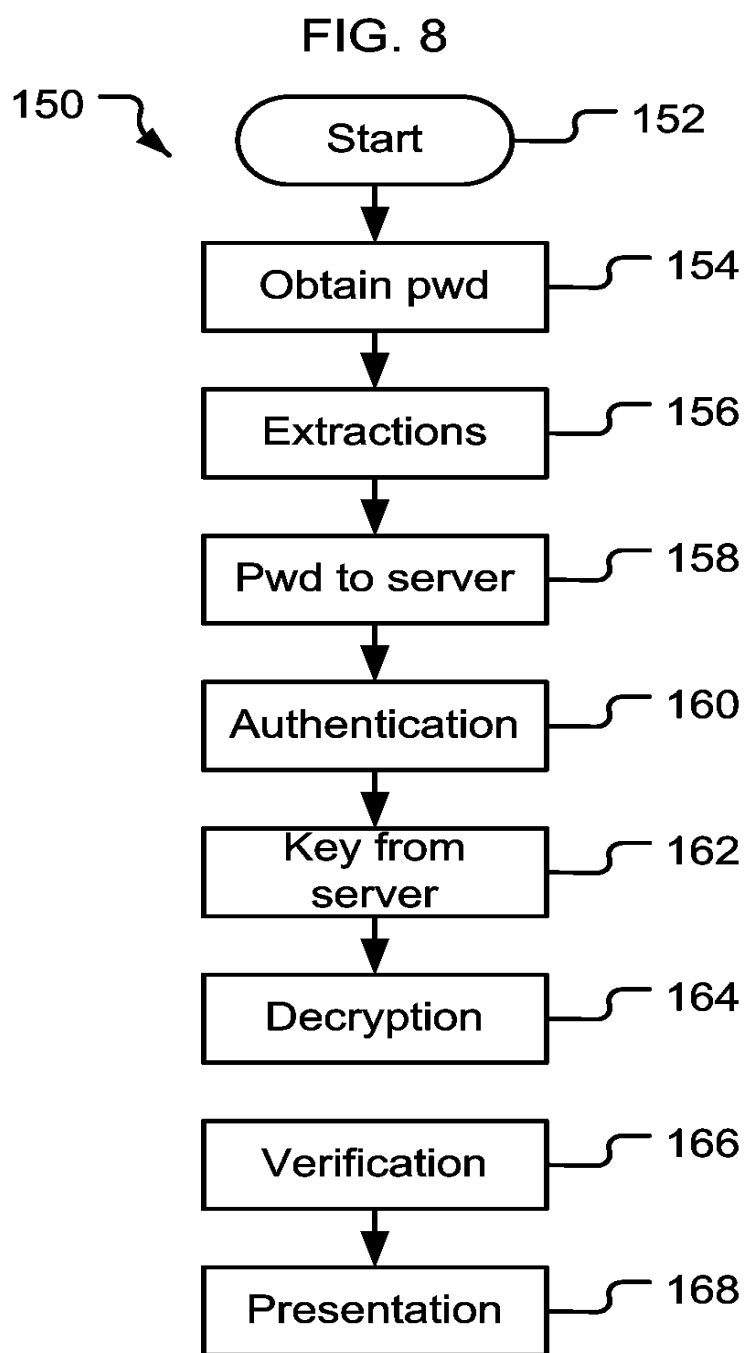
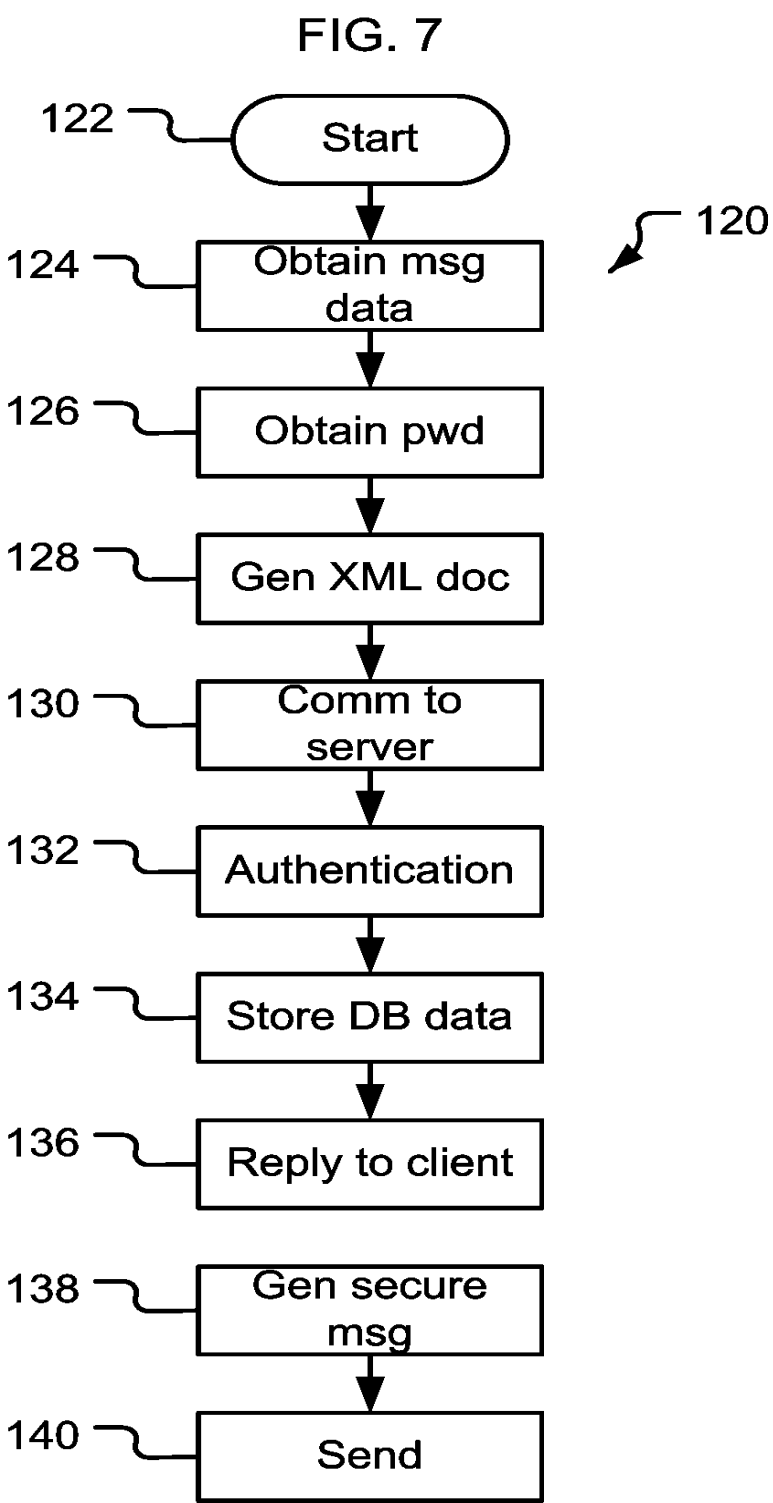


FIG. 4



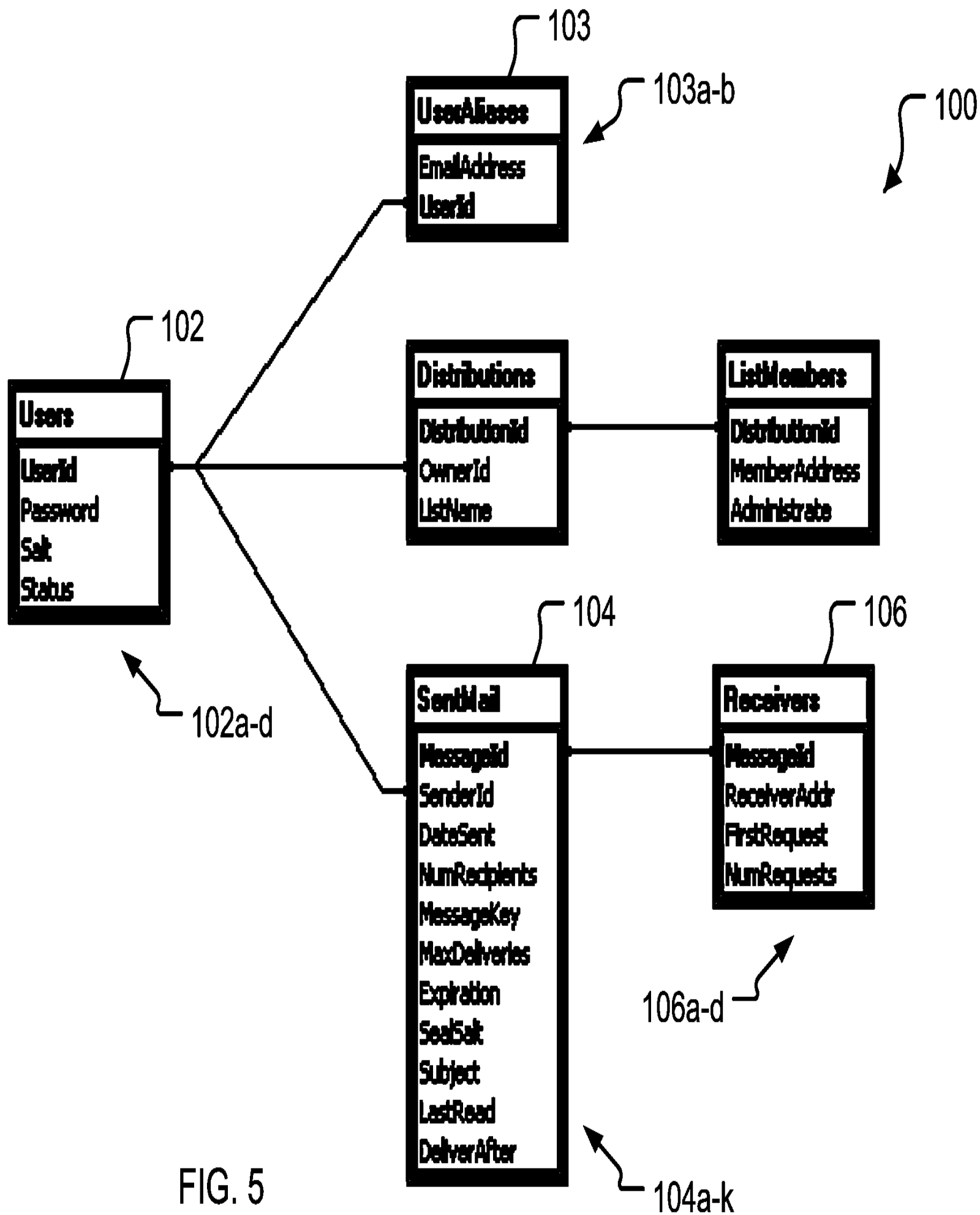


FIG. 6a: Basic user information table (Users)

| Column Name | Type | Description |
|-------------|---------|--|
| UserId | integer | Internal user identifier |
| Password | raw | Hash of user's password |
| Salt | integer | Salt added to password before hash |
| Status | varchar | User's current registration/usage status |

FIG. 6b: Sent messages table (SentMail)

| Column Name | Type | Description |
|---------------|---------|--|
| MessageId | integer | Unique email identifier |
| SenderId | integer | Internal sender identifier (ref to Users) |
| DateSent | date | Time and date record entered |
| NumRecipients | integer | Number of users message was sent to |
| MessageKey | raw | Key used to encrypt/decrypt message |
| MaxDeliveries | integer | Maximum times key is delivered to each user |
| Expiration | date | Time after which message should not be delivered |
| SealSalt | integer | Secret salt added to hash to form seal |
| Subject | varchar | The subject of the message |
| LastRead | date | The date the message was last read |
| DeliverAfter | date | The date after which the message may be read |

FIG. 6c: Email destinations (Receivers)

| Column Name | Type | Description |
|--------------|---------|--|
| MessageId | integer | Email message's identifier (ref to SentMail) |
| ReceiverAddr | integer | Receiver's e-mail address |
| FirstRequest | date | Time the receiver first attempts to read |
| NumRequests | integer | Number of times receiver requested to read |

FIG. 6d: Alternate user identities (UserAliases)

| Column Name | Type | Description |
|--------------|---------|---------------------------|
| EmailAddress | varchar | Alternate email address |
| UserId | integer | Reference to Users table. |

FIG. 6e: Distribution list master (Distributions)

| Column Name | Type | Description |
|----------------|---------|------------------------------------|
| DistributionId | integer | Unique list identifier |
| OwnerId | integer | User who owns list (ref to Users). |
| ListName | varchar | Email address of this list |

FIG. 6f: Distribution list members (ListMembers)

| Column Name | Type | Description |
|----------------|---------|------------------------------------|
| DistributionId | integer | Reference to Distributions |
| MemberAddress | varchar | Name of alias on the list |
| Administrate | char | Y=member can update list, N=cannot |

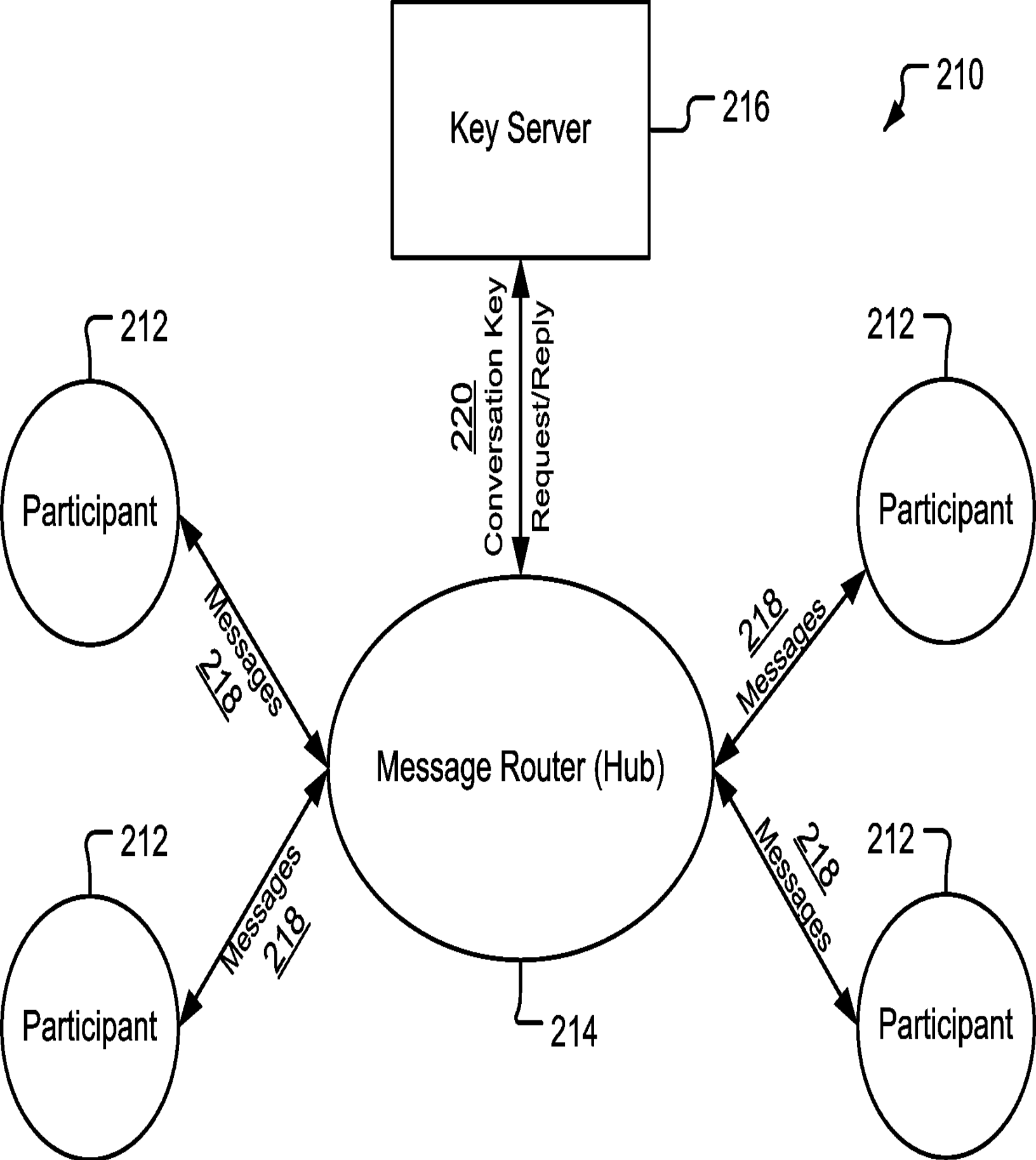


FIG. 9

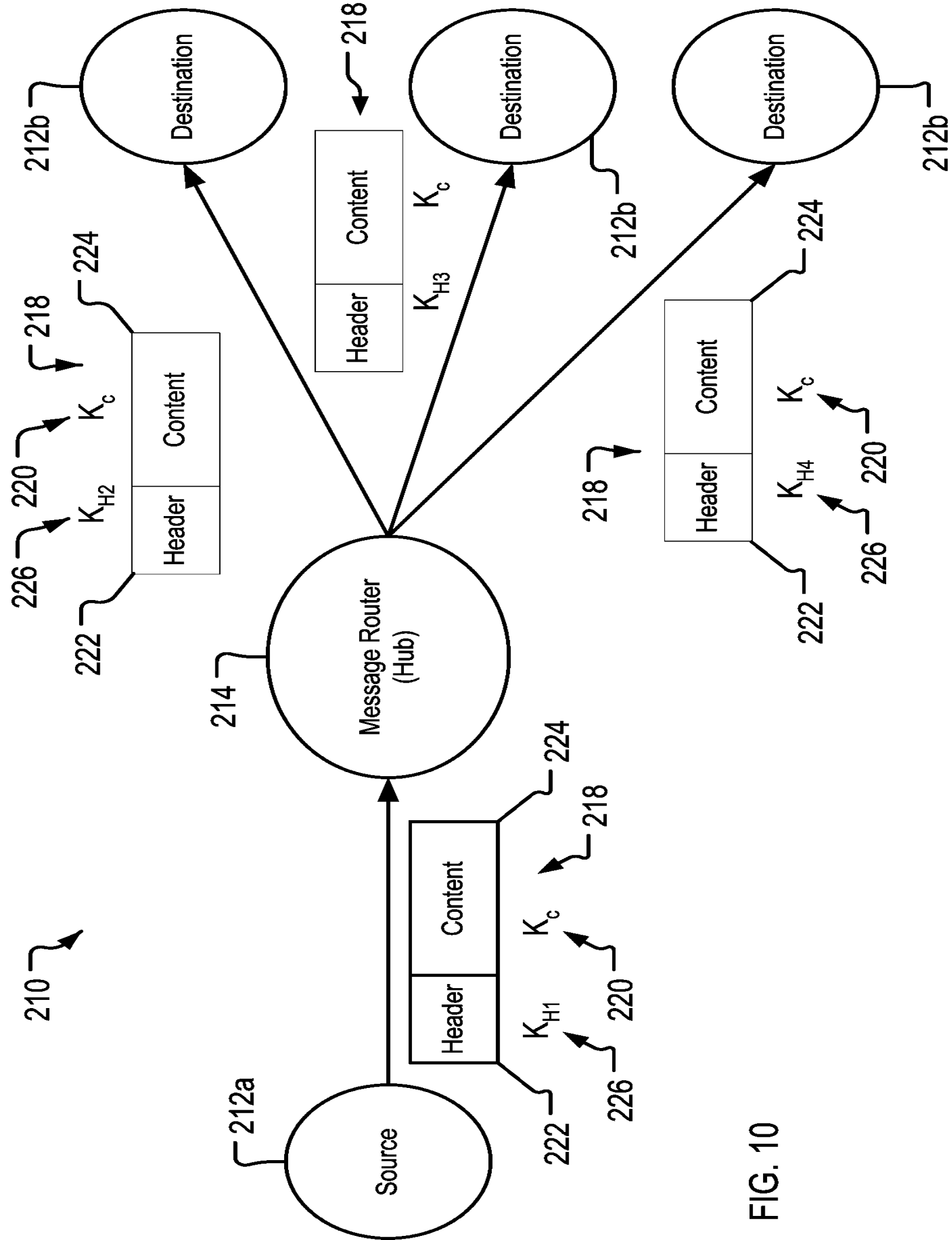


FIG. 10

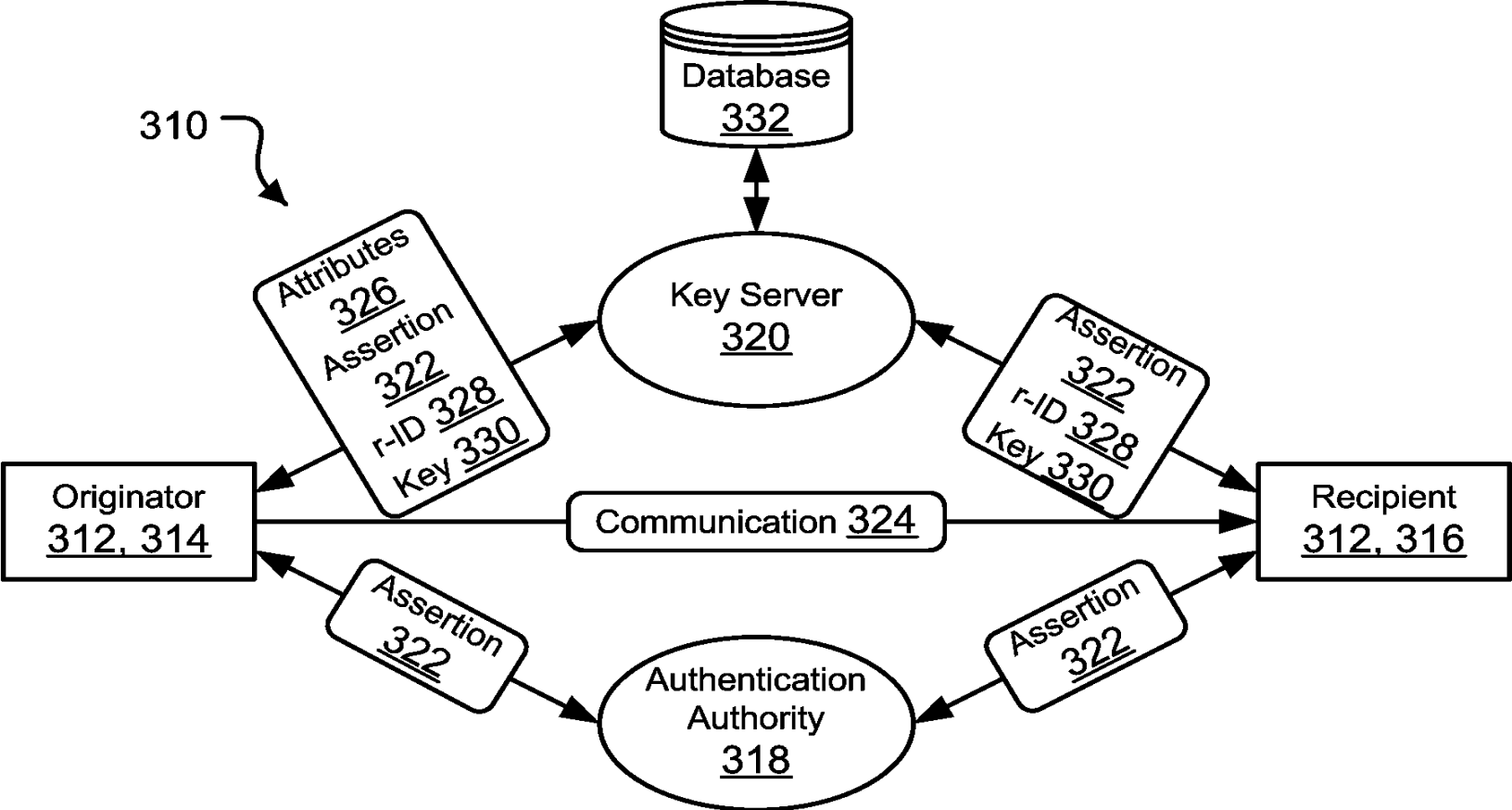


FIG. 11

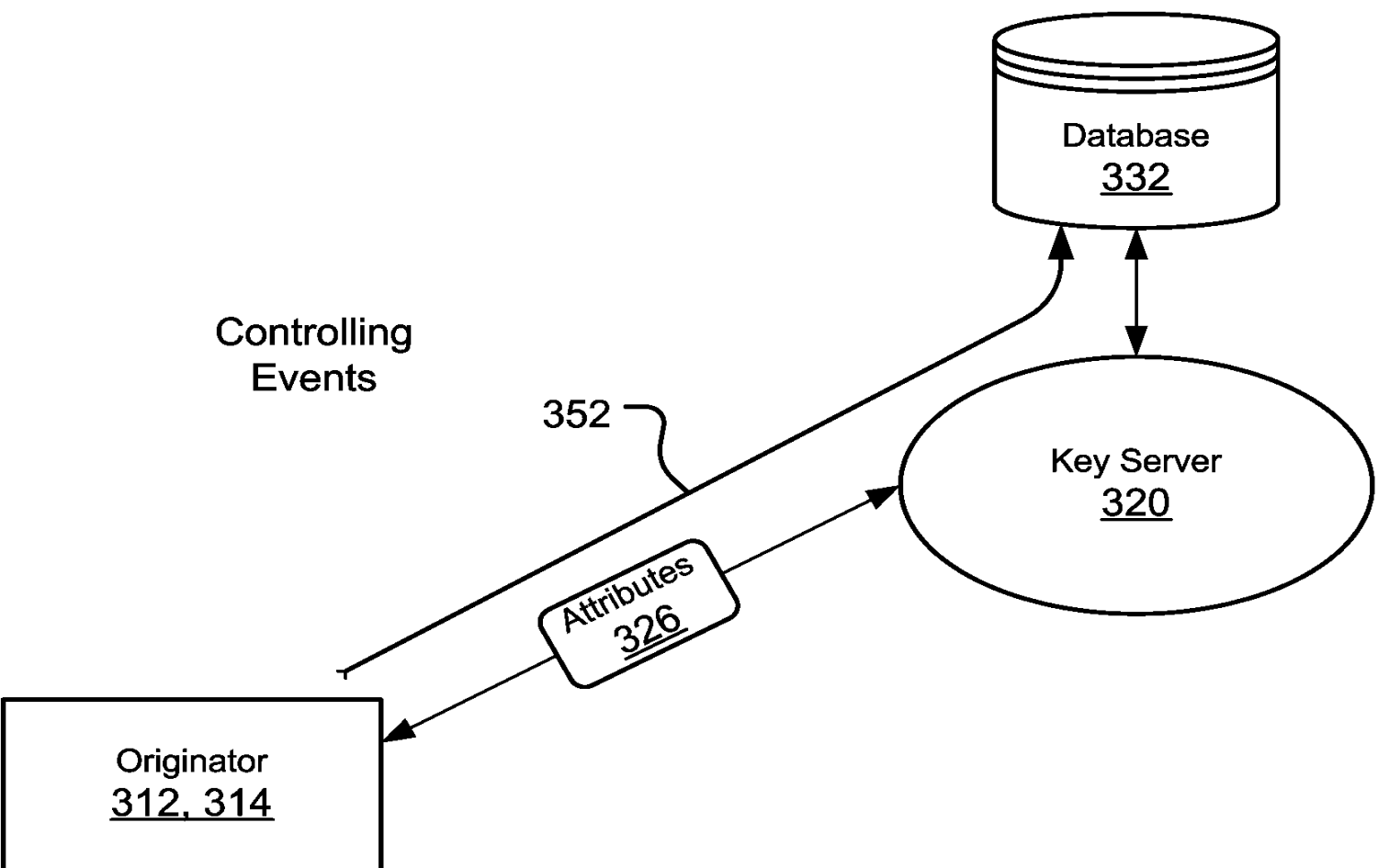


FIG. 12

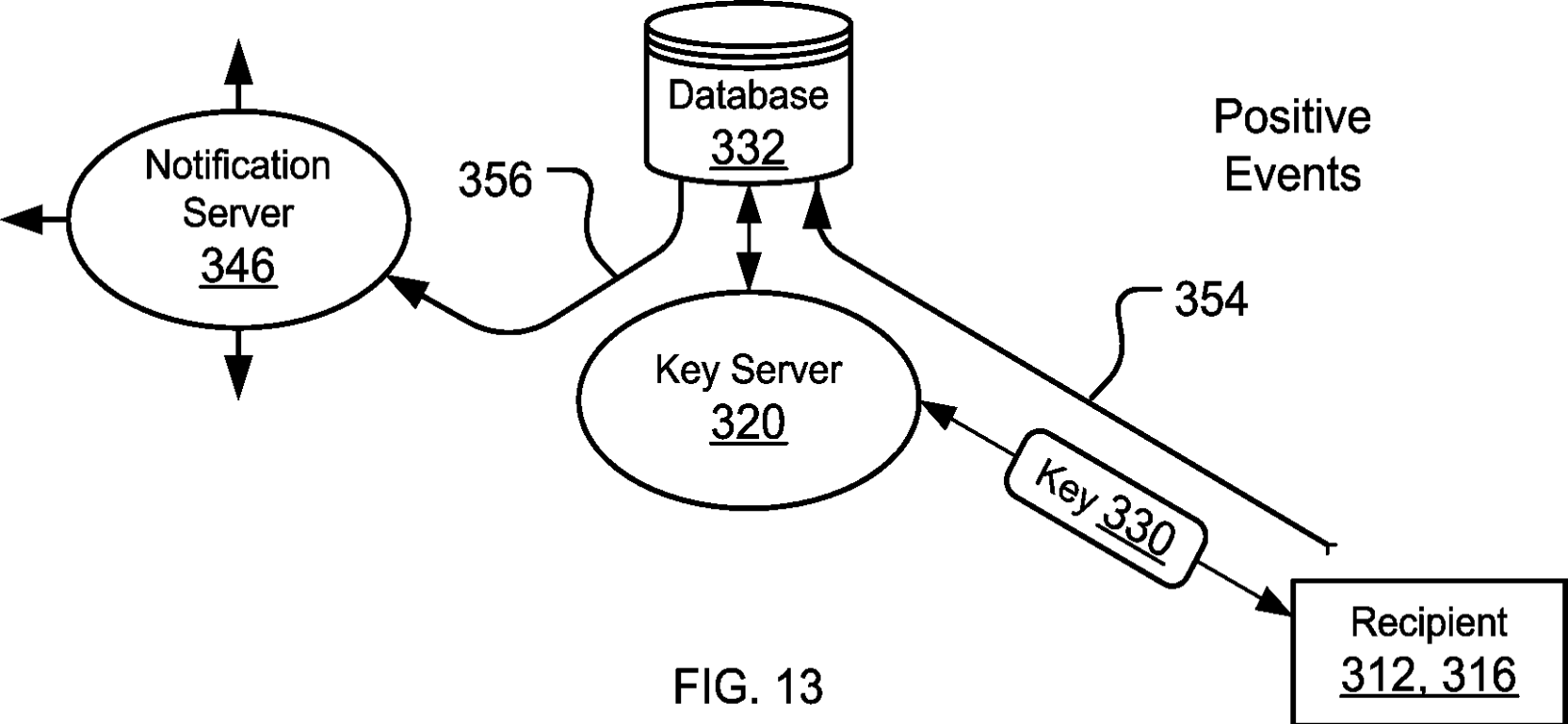


FIG. 13

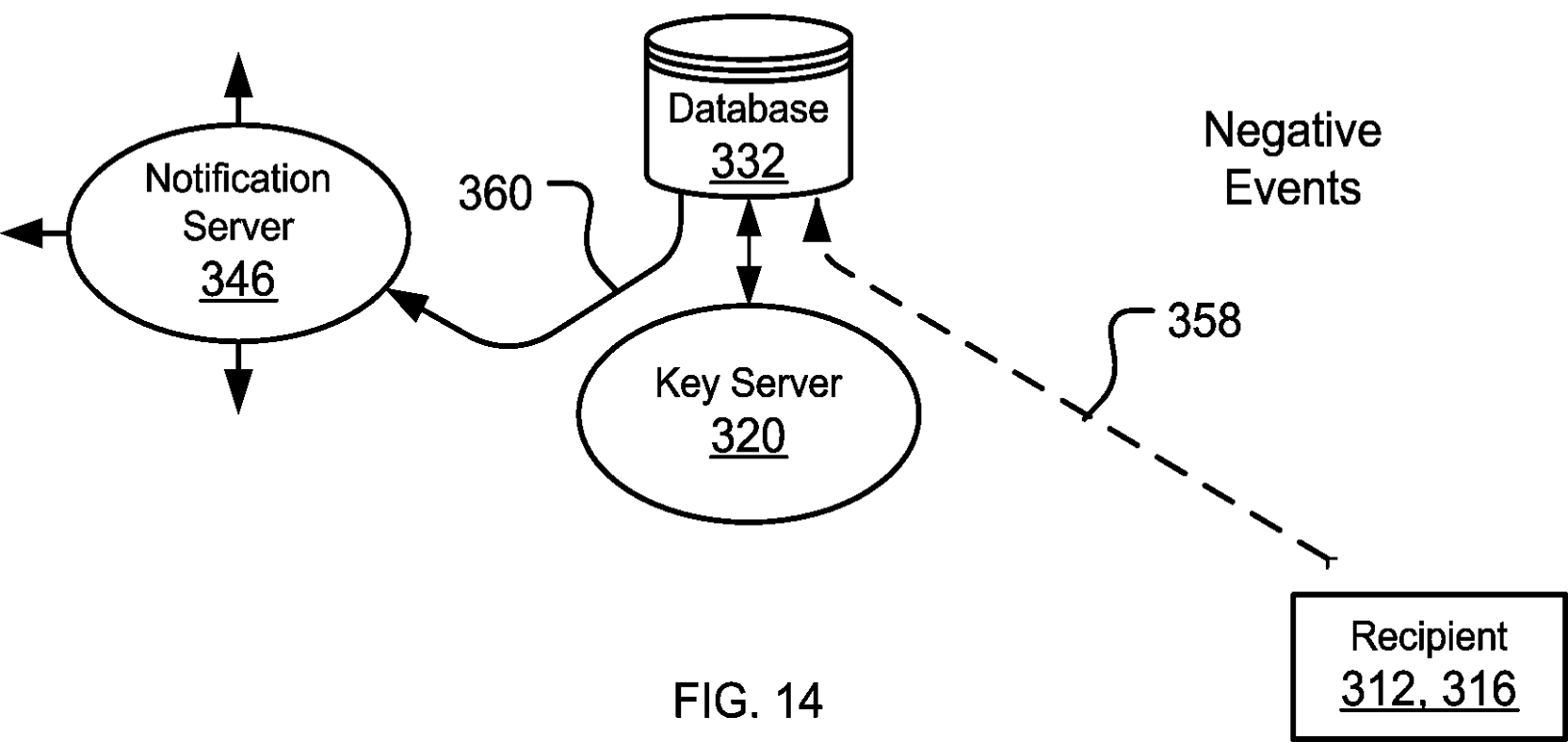


FIG. 14